Vertical Measuring Instruments for the Workshop

1.

INTRODUCTION

The V3 et V4 vertical measuring instruments have been developed for the most difficult workshop environments. Manufactured in their entirety in Switzerland, they will guarantee a robust, precise and reliable product on the long run.

For more than 40 years Trimos philosophy has been to offer easy-to-use instruments that are very efficient in production environment.
The display unit provides functions that are directly accessible and depicted with symbols easy to understand.
This allows for easy and quick handling even by unqualified personnel. The large 2-line « Black Mask » display offers an exceptional contrast in all lighting conditions, a unique characteristic on the market.

- Measuring ranges 400 and 700 mm
- Extremely easy to use
- Electronically adjustable measuring force
- Autonomy: 40 h (lithium-ion batteries)
- Larger than 300 mm probes as standard
- Vast range of accessories
- All adjustments possible without tools
- RS232 et USB interfaces

A Cast iron base for optimal stability

B Horizontal displacement handle with buttons for functions and air cushion (V4)

C Measuring carriage displacement handwheel

D Interchangeable insert holder and probe

E Additional probe holder (V4)

F "Black Mask" display with user-friendly functions

G Easy balance adjustment system

2.

DIFFERENCES

V3

The V3 measuring column represents the entry-level of Trimos universal measuring columns. It fully benefits from the developments realized on superior models. A robust and easy-to-use instrument including all functions essential for a use in the workshop.

V4

The V4 measuring column offers the same functions as the V3. In addition it is equipped with a second probe holder as well as with an air cushion for easy displacement on the measuring table. The programmable functions buttons of the handle allow a quick access to the functions most used.

3.

APPLICATIONS AND FUNCTIONALITIES

Height Measurements
Height, thickness and chain of dimensions measurements

Diameter Measurements
Simultaneous display of diameter and centerline

Min/Max/Delta
Easy detection of min, max points or flatness of a surface

Perpendicularity
All instruments are mechanically corrected
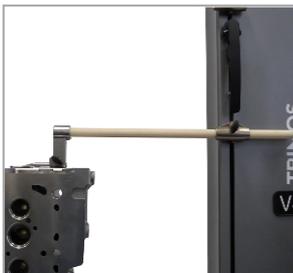
Long Probes
Standard measuring inserts up to 340 mm, with excellent repeatability

Accessories
Very large range of accessories for any type of measurement

User-Friendly Functions
Straighforward symbols and directly accessible functions

Maximum Contrast
Easy reading at any time thanks to the "Black Mask" display

4.

TECHNICAL DATA

V3		400	700
Measuring range	mm	407	711
Measuring range with extension	mm	508	812
Max. permissible errors, E_{MPE}	µm	8	8
Repeatability, R_{MPE} (2s)	µm	2 (Ø: 4)	2 (Ø: 4)
Frontal squareness deviation, S_{MPE}	µm	10	15
Resolution	mm	0.001	
Measuring force	N	0.75 ÷ 1.5	
Autonomy	h	40	
Interfaces		USB / RS232	
Air cushion		No	

V4		400	700
Measuring range	mm	407	711
Measuring range with extension	mm	719	1023
Max. permissible errors, E_{MPE}	µm	5	7
Repeatability, R_{MPE} (2s)	µm	2 (Ø: 4)	2 (Ø: 4)
Frontal squareness deviation, S_{MPE}	µm	10	15
Resolution	mm	0.001	
Measuring force	N	0.75 ÷ 1.5	
Autonomy	h	40	
Interfaces		USB / RS232	
Air cushion		Yes	

Note: The above values have been determined according to ISO 13225. They are valid with the standard measuring insert (TA-MI-101), at a temperature of 20 ± 0.5 °C and relative humidity of 50 ±5%.

STANDARD INSTRUMENT

The V3 and V4 instruments are supplied as follows:	
Instrument according to specifications	Setting Gauge (TA-MG-104)
Charging unit (357 0112)	User's manual (750 50 0045 00)
Measuring insert with ruby ball Ø 4 mm (TA-MI-101)	Test certificate
Probe holder elbow Ø 8 mm (612 11 065)	

CODE NUMBERS

V3		V4		
Without air cushion		**With air cushion**		
V3-400	700 110 10 03	V4-400	700 110 10 04	Measuring range 400 mm
V3-700	700 110 20 03	V4-700	700 110 20 04	Measuring range 700 mm